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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/799,975

03/12/2004

William H. Berkman

CRNT-0208

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10/18/2005

WOODCOCK WASHBURN LLP  
ONE LIBERTY PLACE, 46TH FLOOR  
1650 MARKET STREET  
PHILADELPHIA, PA 19103

EXAMINER

LE, HOANGANH T

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/799,975

Applicant(s)

BERKMAN, WILLIAM H.

Examiner

HoangAnh T. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 40-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**HoangAnh Le**  
**Primary Examiner**

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/04&8/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
2. Applicant's election without traverse of group I (claims 1-39) in the reply filed on August 23, 2005 is acknowledged.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the insulative material located between the antenna and the transformer of claims 10 and 36 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4,10-12, 15-19,21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Benioff (the US patent No. 2,473,780).

The Benioff reference teaches in figure 2 a device to be mounted on a structure for communicating a wireless signal in at least one frequency range, comprising: an antenna 33,34 capable of communicating the wireless signal, the antenna having an antenna shape, and a material 2 encasing the antenna and having an external shape different from the antenna shape, wherein the material facilitates attachment to the structure 1. The material 2 is emissive. The material 2 is insulative. The structure is a transformer (18) enclosure 1 and further comprising a conductor 35 communicatively coupled to the antenna 33,34 and that passes through an aperture in the transformer enclosure (figure 2). Figure 2 shows an insulative material 25 configured to be mounted between the antenna 33,34 and the structure 48. The structure is a transformer enclosure 1 and the material 4 is disposed between the antenna and the transformer

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enclosure 18,1 when the device is mounted to the transformer enclosure 1. The antenna receives signals in a predetermined frequency range, and wherein the material is emissive within the predetermined frequency range. The material comprises at least one of the following: rubber, plastic, and Mylar (col.1, lines 24-28). The material has a thickness that facilitates preventing access to the antenna (figure 2). A first external dimension of the antenna is substantially different than the first external dimension of the material (figure 2). A second external dimension of the antenna is substantially different than the second external dimension of the material. The antenna is directionally oriented within the material. The material comprises holes to facilitate mounting to the structure (figure 2).

6. Claims 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Eugheta et al (the US patent No. 5,398,037).

The Eugheta et al reference teaches in figure 10c a system for communicating a wireless signal comprising: a protective material 290, an antenna 230 embedded in the material 290, wherein a first external dimension of the antenna is substantially different than the first external dimension of the material, and wherein a second external dimension of the antenna is substantially different than the second external dimension of the material (figure 10c and col. 6, lines 40-41). The system further comprises an inherent first communication device communicatively coupled to the antenna.

7. Claims 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Frecska (the US patent No. 6,563,465).

The Frecska reference teaches in figure 1 a system for communicating a wireless signal comprising: a protective material 80, an antenna 20 embedded in the material 80, wherein a first external dimension of the antenna is substantially different than the first external dimension of the material, and wherein a second external dimension of the antenna is substantially different than the second external dimension of the material (figure 1 and col. 3, lines 3-5 and lines 23-26). The system further comprises a first communication device 70 communicatively coupled to the antenna.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benioff (cited above) in view of Cope et al ( the US 2004/0227621).

The Benioff reference teaches every feature of the claimed invention, excluding the conductor being communicatively coupled to a first communication device, the first communication device providing communication to a customer premise that is electrically coupled to the transformer in the transformer enclosure, the first communication device being a backhaul point, the first communication device being disposed at a distribution transformer, and the antenna being communicatively coupled to at least one low voltage power line.

The Cope et al reference teaches in figure 2 the use of a conductor being communicatively coupled to a first communication device, the first communication device providing communication to a customer premise 40 that is electrically coupled to the transformer in the transformer enclosure, the first communication device being a backhaul point 10, the first communication device being disposed at a distribution transformer 60, and the antenna being communicatively coupled to at least one low voltage power line in order to facilitate bi-directional communication and to be installed without disrupting power to customers (page 1, parag. [0008]).

Since one of ordinary skill in the art would recognize the benefit to facilitate bi-directional communication, it would have been obvious to provide Benioff with the conductor being communicatively coupled to a first communication device, the first communication device providing communication to a customer premise that is electrically coupled to the transformer in the transformer enclosure, the first communication device being a backhaul point, the first communication device being disposed at a distribution transformer, and the antenna being communicatively coupled to at least one low voltage power line as taught by Cope et al.

10. Claims 13,14,20,23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benioff (cited above) in view of Frecska (the US patent No. 6,563,465).

The Benioff reference teaches every feature of the claimed invention, excluding the material having a substantially planar face, the antenna being disk-shaped, the

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antenna being flat rectangular material and the material prevents structure deformation of the antenna.

The Frecska reference teaches in figure 1 the use of a material 80 having a substantially planar face, the antenna 20 being disk-shaped (col. 3, lines 3-5), the antenna being flat rectangular material (col. 3, lines 24-25), and the material prevents structure deformation of the antenna (col. 4, lines 57-67 and col. 5, lines 1-7) in order to improve the characteristics of the antenna.

Since one of ordinary skill in the art would recognize the benefit of improving the characteristics of the antenna, it would have been obvious to provide Benioff with the material having a substantially planar face, the antenna being disk-shaped, the antenna being flat rectangular material and the material prevents structure deformation of the antenna as taught by Frecska.

11. Claims 27-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frecska (cited above) in view of Cope et al (the US 2004/0227621).

The Frecska reference teaches every feature of the claimed invention, excluding the first communication device being communicatively coupled to at least one low voltage power line, the low voltage power line being electrically coupled to a customer premise, a second communication device in communication with the first communication device, the first communication device, comprising: a first modem; a first router in communication with the first modem, and a first wireless transceiver in communication with the first modem, the second communication device, comprises: a second modem; a second router in communication with the second modem; and

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a second wireless transceiver in communication with the second modem, the second wireless transceiver uses IEEE standard 802.11, the first wireless transceiver uses IEEE standard 802.11.

The Cope et al reference teaches in figure 2 the use of a first communication device being communicatively coupled to at least one low voltage power line, the low voltage power line being electrically coupled to a customer premise 40, a second communication device in communication with the first communication device, the first communication device, comprising: a first modem 450; a first router 310 in communication with the first modem, and a first wireless transceiver in communication with the first modem, the second communication device, comprises: a second modem 280; a second router 310 in communication with the second modem; and second wireless transceiver in communication with the second modem, the second wireless transceiver uses IEEE standard 802.11, the first wireless transceiver uses IEEE standard 802.11 (page 14, parag. [0182]) in order to facilitate bi-directional communication and to be installed without disrupting power to customers (page 1, parag. [0008]).

Since one of ordinary skill in the art would recognize the benefit to facilitate bi-directional communication, it would have been obvious to provide Benioff with the first communication device being communicatively coupled to at least one low voltage power line, the low voltage power line being electrically coupled to a customer premise, a second communication device in communication with the first communication device, the first communication device comprising: a first modem; a first router in

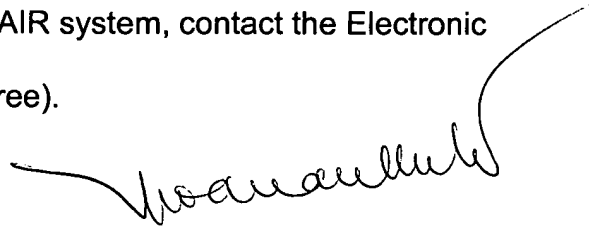
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communication with the first modem, and a first wireless transceiver in communication with the first modem, the second communication device, comprises: a second modem; a second router in communication with the second modem; and a second wireless transceiver in communication with the second modem, the second wireless transceiver uses IEEE standard 802.11, the first wireless transceiver uses IEEE standard 802.11 as taught by Cope et al.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HoangAnh T. Le whose telephone number is (571) 272-1823. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hoanganh Le  
Primary Examiner